

1 **REMARKS**

2 Reconsideration of the application in view of the above amendments and the following remarks
3 is respectfully requested.

4 A clean copy of the amended specification is appended at the end of this response and
5 amendment.

6 Claims 35-67 are pending in this application.

7 The office action states that Claims 35-67 are rejected under Section 35 U.S.C. 112.

8 The claims have been amended to remove the lack of antecedence noted by Examiner. The
9 claims have been amended to substitute the words "large plurality" for "large number" and "large
10 group". Note that the claims have not been broadened or narrowed by the above amendments.
11 The claims have not been amended to narrow them on the basis of any prior art known to
12 Applicant.

13 Applicant states that "large plurality" is very well understood in the patent literature, as
14 there are 568 references in the patent publications in 4 years, and 2504 hits in the US issued
15 patents since 1976. Rapid scans on the last 10 publications reveals only two with any definition
16 of "large plurality". All others of the 8 publications have a single instance of "large plurality"
17 with no actual number quoted in the same paragraph. These are quoted below:

18 United States Patent Application 20040157314 Bergeron, Dominique ; et al. filed
19 August 12, 2004

20 "[0151] In a preferred embodiment, the screening methods of the invention are "high throughput
21 method of screening" which means that they allow the evaluation or screening of a large plurality
22 of compounds, rather than just one or a few compounds. Preferably the methods of screening
23 according to the invention can be used to conveniently test at least 100, more preferably at least
24 1000, still more preferably at least 10,000, and most preferably at least 100,000 different
25 compounds, or even more per day. In an even more preferred embodiment, the method of
26 screening is amenable to automated, cost-effective high throughput screening on libraries of
27 compounds for lead development."

1 62. (currently amended) The method of claim 47, wherein the vibrational spectrum is
2 characterized by characterization means comprises a means for illuminating the cells;
3 and a means for analyzing the Raman scattered light emitted from the cells.

1 63. (currently amended) The method of claim 62, wherein ~~the means for illuminating the cells~~
2 ~~comprises~~ cells are illuminated by a first laser having a first defined wavelength.

1 64. (previously presented) The method of claim 63, wherein the first laser is pulsed when the
2 location means locates a first cell in a position to be illuminated by the first laser.

1 65. (previously presented) The method of claim 64, wherein the Raman spectrum of each cell
2 is recorded.

1 66. (previously presented) The method of claim 65, wherein the Raman spectrum of each cell
2 is analyzed for indications that the cell is in a cell division stage.

1 67. (previously presented) The method of claim 66, wherein the indication that a cell is in a
2 cell division stage is the presence of a signal indicating DNA in the Raman spectra.

- 1 53. (currently amended) The method of claim 48, wherein the means for generating infrared
2 ~~light comprises each cell is illuminated with infrared light from~~ a third laser having a
3 broad band infrared wavelength range.
- 4 54. (previously presented) The method of claim 53, wherein the third laser is pulsed when the
5 location means locates a first cell in a position to be characterized by the laser.
- 1 55. (previously presented) The method of claim 54, wherein the broad band infrared
2 wavelength range includes a wavelength wherein DNA is highly absorbing.
- 1 56. (previously presented) The method of claim 55, wherein the broad band infrared
2 wavelength range includes a wavelength wherein RNA is highly absorbing.
- 1 57. (previously presented) The method of claim 56, wherein the infrared absorption spectrum
2 of each cell is recorded.
- 1 58. (previously presented) The method of claim 57, wherein the infrared absorption spectrum
2 of each cell is analyzed for indications that the cell is in a cell division stage.
- 1 59. (previously presented) The method of claim 58, wherein the percentage of the cells in the
2 cell division stage is calculated.
- 1 60. (previously presented) The method of claim 59, wherein the indication that a cell is in a
2 cell division stage is the presence of a signal indicating DNA in the infrared absorption
3 spectra.
- 1 61. (previously presented) The method of claim 47, wherein the location means is a
2 fluorescence activated sorting method

- 1 62. (currently amended) The method of claim 47, wherein the vibrational spectrum is
2 characterized by ~~characterization means comprises a means for illuminating the cells;~~
3 ~~and a means for analyzing the Raman scattered light emitted from the cells.~~
- 1 63. (currently amended) The method of claim 62, wherein ~~the means for illuminating the cells~~
2 ~~comprises~~ cells are illuminated by a first laser having a first defined wavelength.
- 1 64. (previously presented) The method of claim 63, wherein the first laser is pulsed when the
2 location means locates a first cell in a position to be illuminated by the first laser.
- 1 65. (previously presented) The method of claim 64, wherein the Raman spectrum of each cell
2 is recorded.
- 1 66. (previously presented) The method of claim 65, wherein the Raman spectrum of each cell
2 is analyzed for indications that the cell is in a cell division stage.
- 1 67. (previously presented) The method of claim 66, wherein the indication that a cell is in a
2 cell division stage is the presence of a signal indicating DNA in the Raman spectra.

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24 1000, still more preferably at least 10,000, and most preferably at least 100,000 different
25 compounds, or even more per day. In an even more preferred embodiment, the method of
26 screening is amenable to automated, cost-effective high throughput screening on libraries of
27 compounds for lead development."

1 20040145497 Automated traffic control system having an interactive emergency vehicle
2 warning therein

3 "Here, the matrix includes a large plurality of several hundred individual diodes behind a clear
4 glass or polycarbonate lens. In normal operation, all or almost all of the yellow light-emitting
5 diodes are operative for a signal "A" that transpires during normal nonemergency operation"

6 From these two examples, it seems clear that "large plurality" is in the region of a
7 hundred or more.

8 No additional fee is required. The required fees and any insufficiency or overage (except
9 issue fees) may be debited or credited to deposit account 08/2240. A signed deposit account
10 authorization is on file for this case.

11 On the basis of the above amendments and remarks, reconsideration of this application
12 and its early allowance is respectfully requested.

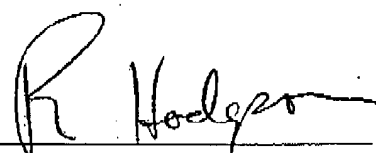
13 CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 CFR 1.8(a) and (b), 37CFR 1.86(f)-

14 I hereby certify that the following attached correspondence comprising Response and Amendment is being sent by facsimile transmission to
15 FAX NUMBER 703-872-9306 on August 28, 2004.

16 Amendment and Response

17 to:

18 Commissioner of Patents, Alexandria, VA 22313-1450

19
20 
21

22 Respectfully,

23
24 822 Pinesbridge Road,

25 Ossining, NY 10562.

26 914-762-5248 (Fax 914-762-4126)

27 E-MAIL - patents@aip.org

Rodney T. Hodgson Agent # 37,849

(Name of person mailing paper or fee)



24295

PATENT TRADEMARK OFFICE

Docket No 998-021 serial No. 09/868,463 Inventors Diem, Max, Bargonetti, Jill, Ogon, Tamará, Boydston-White, Supie, .
Method of Characterization of Biological Entities-filing date June 18, 2001, art unit 1743 examiner Jan M. Ludlow

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